

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Yingwei Claire Cui et al.                      Art Unit : 3622  
Serial No. : 10/649,585                                      Examiner : Arthur D. Duran  
Filed : August 27, 2003                                      Conf. No. : 4994  
Title : CONTENT-TARGETED ADVERTISING USING COLLECTED USER  
              BEHAVIOR DATA

**MAIL STOP AF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

REASONS FOR PRE-APPEAL CONFERENCE REQUEST

In reply to the Final Office Action of June 14, 2010 (“final action”), and the Advisory Action of August 24, 2010 (“advisory action”), Applicant submits a Notice of Appeal, a Pre-Appeal Brief Request for Review, and the following reasons for the Pre-Appeal Conference Request.

Claims 109-156 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gerace (U.S. Patent No. 5,848,396) in view of Graham (U.S. Patent Publication No. 20060122884). Applicant respectfully submits that the Examiner has made clear errors in finding that “modifying ... the initial advertisement performance information for an advertisement using the concept performance information for an identified concept corresponding to the advertisement,” as recited by claim 1, would have been obvious in view of the asserted combination of Gerace and Graham.

At page 4 of the final office action, the Examiner notes that “Gerace does not explicitly disclose for each identified concept, content-concept performance, and corresponding to the concept, using the concept performance, or performance based on concept,” and concludes at page 5 of the office action that “it is obvious that Gerace can track performance for different page content/concepts and ad content relevance.” The Examiner also states that “as a further example of this, Graham discloses concept/topic for documents and presenting relevant ads and also relevance scores.”

In the advisory action, the Examiner states that the after-final response filed on August 16, 2010 “does NOT place the application in condition for allowance because: Applicant

presents arguments after-final against the Gerace reference. However, a 103 rejection with Gerace in view of Graham was made. Examiner notes that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.”

However, the after-final response (and a non-final response filed seven days prior to issuance of the final action) addressed the deficiencies of Gerace, Graham, and combinations thereof. For example, remarks on pages 14-18 of the after-final response describe the deficiencies of the Gerace reference, and also provide an explanation of why one of ordinary skill in the art would not have been motivated to modify Gerace to arrive at the claimed subject matter. Additionally, pages 19-23 describe the deficiencies of Graham and combinations of Gerace and Graham. Finally, page 23 of the after-final response recites that “the disclosure of ... Graham fail[s] to cure the deficiencies of Gerace. Additionally, neither Gerace nor Graham provides a teaching, suggestion, or motivation to modify the combination of Gerace and Graham to arrive at the subject matter of claim 109.” Based on the foregoing, it was clear error for the Examiner to maintain the rejection based on the reasons provided in the Advisory Action.

#### I. Gerace

According to the Abstract, Gerace discloses:

targeting of appropriate audience based on psychographic or behavioral profiles of end users. The psychographic profile is formed by recording computer activity and viewing habits of the end user. Content of categories of interest and display in each category are revealed by the psychographic profile, based on agate information. Using the profile (with or without additional user demographics), advertisements are displayed to appropriately selected users. Based on regression analysis of recorded responses of subsequent sets of users viewing the advertisements, the target user profile is refined.

At column 18, lines 1-26, Gerace further states that a sponsor can provide and weight demographic/psychographic targeting criteria “to ensure ads are shown to the appropriate target users,” and that a “after a large number (e.g., 10,000) hits, program 31 runs a regression on a subject Ad Package Object 33b [i.e., an advertisement] to see what characteristics are important, and who (**type of user profile**) the ad appeals to the most. Program 31 then **automatically enters weighting information based on that regression** to create a targeted system and runs the advertisement (Ad Package Object 33b) again in front of this new targeted group.”

#### II. Graham

According to its Abstract, Graham discloses “distributing online advertising to viewers based upon the viewers’ interests,” which “may involve identifying one or more document-related concepts derived from analysis of the content of a web document capable of being displayed to the user, identifying one or more advertisement-related concepts, comparing the one or more document-related concepts to determine a relevance, and selecting the advertising based on the relevance.”

Paragraph 0032 of Graham notes, for example, that specified words on a document “comprise a context that causes display of the first advertisement 107, “Ad345” because of the correspondence between the **concepts in this advertisement** and the **concepts in the contents of the document portion 105.**” Thus, paragraph 0032 is describing selection of advertisements based on their relevancy “to the concepts being viewed by the user.” Paragraph 0039 notes that “advertising can be targeted based upon the user's concepts of interest,” while paragraphs 0047-0049 note how advertisement concepts and user concepts can be compared to select an advertisement that is associated with “advertising concepts which are more similar to the current document.”

### III. The Claimed Subject Matter

Independent claim 109 recites “**modifying**, by at least one processor, the initial **advertisement performance information** for an advertisement using the **concept performance information** for an identified concept corresponding to the advertisement,” where “the advertisement performance information for each advertisement specif[ies] a measure of performance computed based on previous presentations of the advertisement,” and where “concept performance information represent[s] an aggregate performance of advertisements that were presented with the document and corresponding to the concept.” The remaining independent claims recite similar features.

The claimed modification of advertisement performance information is advantageous, for example, “because ads (or ad groups) and/or advertisers may be transient, in which case it may be difficult, if not impossible, to gather statistically significant amount of user behavior data with respect to a given ad (or ad group) for a given document. Since there may be a relatively small number of tracked user behavior (e.g., clicks) compared to the number of documents (as identified by their URLs) and ads, a user behavior (click) statistics matrix may be rather sparse.

Some ads have very few clicks and impressions.....” However, the limited data points can be used with “performance parameter estimation (extrapolation) operations 496, 596 to populate user behavior (e.g., click) statistics of ads for which there is no (or very little) user behavior data for the document (or host). These operations 496, 596 may use concepts as a bridge for propagating statistics from ads to [other] ads.” Application at 34.

IV. Gerace, Graham, and Combinations Thereof Fail to Disclose or Render Obvious  
Modifying Initial Advertisement Performance as Recited by the Claims

The rejection of claim 109 as being obvious in view of Gerace and Graham is clear error because the combination of Gerace and Graham fails to disclose “modifying ... the initial advertisement performance information for an advertisement using the concept performance information for an identified concept corresponding to the advertisement,” and it would not have been obvious to one of ordinary skill in the art to modify the combination of Gerace and Graham to arrive at the elements recited by claims 109.

As noted at page 17 of the after-final response, the Examiner asserts that at column 18, lines 1-26, Gerace discloses “modifying ... the advertisement performance information,” as recited by claim 109. However, this portion of Gerace at most discloses that “after a large number (e.g., 10,000) hits, program 31 runs a regression on a subject Ad Package Object 33b [i.e., an advertisement] to see what characteristics are important, and who (**type of user profile**) the ad appeals to the most. Program 31 then **automatically enters weighting information based on that regression** to create a targeted system and runs the advertisement.”

At column 12, lines 28-31, Gerace notes that “**the sponsor specifies** ... required and/or preferred **psychographic and/or demographic criteria** and relative importance (e.g., weight) with respect to each criterion.” Therefore, the “automatically enter[ed] weighting information” of Gerace is weighting information for “psychographic and demographic criteria,” which is not the same as the “initial advertisement performance information” because the “psychographic and demographic criteria” of Gerace **do not** specify “a measure of performance computed based on previous presentations of the advertisement,” as recited by claim 109. Rather, the “psychographic and demographic criteria” represent “characteristics of users.” Gerace at Col. 2, line 47. These user characteristics are for targeting advertisements rather than measuring performance of advertisements.

At page 5 of the final action, the Examiner states that Graham "discloses concept/topic for documents and presenting relevant ads (Fig. 1c; 9a; claim 27) and also relevance scores ([32, 39, 47-49])." However, as described in detail at pages 18-23 of the after-final response, the relied upon portions of Graham fail to cure the deficiencies of Gerace. For example, as described in more detail at pages 18-23 of the after-final response, targeting advertisements based on relevance does not teach, describe, or otherwise suggest modification of advertisement performance parameters using "aggregate performance of advertisements that were presented with the document" and that correspond to the concept."

At page 5 of the final action, the Examiner asserts that based on the disclosure of Gerace and Graham, "it is obvious that Gerace can track performance for different page content/concepts/topics and ad content relevance," and that "one would be motivated to do this to better target relevant ads." As noted in the after-final response, while "targeting relevant ads" may be a goal of advertisement targeting, there are many different ways in which one of ordinary skill in the art could attempt to achieve better "targeting" of "relevant ads." Thus, the goal of "better targeting relevant ads" alone does not provide "a clear articulation of the reason(s) why the claimed invention would have been obvious," as required to support a prima facie case of obviousness. MPEP § 2143.

#### IV. Conclusion

For the reasons set forth above, Gerace, Graham, and asserted combinations of the two fail to teach, describe, or otherwise suggest selecting commercial information, as recited by the independent claims. Therefore, the rejections over the asserted combinations of Gerace and Graham should be reversed. Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 11/12/10



Tracy M. Hitt  
Reg. No. 62,371

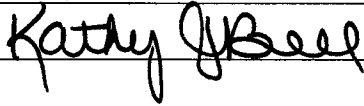
Customer Number 26192  
Telephone: (404) 892-5005  
Facsimile: (877) 769-7945

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**Docket Number (Optional)  
16113-0760001

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on November 12, 2010

Signature



Typed or printed  
name Kathy J. Bell

Application Number  
10/649,585

Filed  
August 27, 2003

First Named Inventor  
Alexander P. Carobus

Art Unit  
3622

Examiner  
Arthur D. Duran

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

☒

attorney or agent of record.

Registration number 62,371

☐

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 \_\_\_\_\_



Signature

Tracy M. Hitt

Typed or printed name

(404) 892-5005

Telephone number

November 12, 2010

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐

\*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.